



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/743,996	12/22/2003	Noriyuki Isobe	9369-67U1 (U01-165196C/KK)	9045
570	7590	06/09/2005	EXAMINER	
AKIN GUMP STRAUSS HAUER & FELD L.L.P. ONE COMMERCE SQUARE 2005 MARKET STREET, SUITE 2200 PHILADELPHIA, PA 19103			BISSETT, MELANIE D	
			ART UNIT	PAPER NUMBER
			1711	

DATE MAILED: 06/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/743,996	<b>Applicant(s)</b> ISOBE ET AL.	
	<b>Examiner</b> Melanie D. Bissett	<b>Art Unit</b> 1711	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 24 March 2005.
- 2a) ☐ This action is **FINAL**.
- 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-15 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

26

1. The prior art rejections have been maintained. Also, upon reconsideration of the claim language, new prior art rejections have been provided for claims previously indicated as allowed.

***Claim Rejections - 35 USC § 102***

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 7-8 and 11-12 are rejected under 35 U.S.C. 102(b) as being anticipated by The Australian Gas Light Company (AGLC).

AGLC discloses adhesives for polyamide materials comprising a phenolic group-containing solvent and a polyamide (abstract). Phenolic solvents are preferred (p. 6) as a solvent, while the polyamide of the substrate is a preferred additive to the solvent (pp. 8-9). Substrates include molded pipes fittings (pp. 2-3). The reference suggests using the composition to adhere two nylon resins together (pp. 8-9), also suggesting nylon copolymers as substrates (p. 11).

4. Claims 1-5 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Akkapeddi et al.

5. Akkapeddi discloses thermoplastic polymeric molding compositions comprising a blend of a first polyamide and a second copolyamide (abstract). Preferred conventional polyamides for the first polyamide include nylon 12 and nylon 6 (col. 5 lines 20-22), and the second polyamides contain two or more units derived from the claimed monomers (cols. 5-7). The copolyamide contains up to 50% by mole of B<sub>1</sub>, where three of the seven exemplary materials have 12 carbon atoms (col. 6 lines 24-33). Preferably, at least 50% by weight of the first polyamide is blended with the copolyamide.

Conventional lubricants, including metal soaps, are added in amounts of 5% by weight

Art Unit: 1711

or less (col. 10 lines 17-23), while nucleation promoters, including talc, are added in amounts of less than 5% by weight (col. 10 lines 53-63).

6. Regarding the claimed "joint to be adhered to nylon resin moldings using a solvent adhesive," it is noted that the reference teaches moldings made from the polyamide blends in various shapes (col. 11 lines 6-19). It is the examiner's position that the term "joint" is given little patentable weight since any material capable of being joined to another can be considered a joint. Also, it is noted that the solvent adhesion recitation is an intended use of the article and thus is also given little patentable weight. It is the examiner's position that the moldings of Akkapeddi's invention are inherently capable of being joined using a solvent adhesive and thus anticipate the present claims.

7. Claims 10 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Kawaguchi et al.

8. Kawaguchi discloses self-welding compositions applied to magnets, where the compositions comprise a solution of a nylon 12-containing copolymer in a phenolic solvent (abstract). The copolyamides are made from the claimed monomers, including nylon 12 in 20-90% of the polymer backbone (col. 4 lines 14-36; examples). The solutions have concentrations of 15-25% (examples), teaching a composition of a solvent and 0.5-20% of a copolymerized nylon. It is the examiner's position that the solutions would inherently act as solvent adhesives, since they contain the same materials claimed by the applicant.

***Claim Rejections - 35 USC § 103***

9. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

10. Claims 9, 13, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over AGLC.

11. From a prior Office action:

AGLC applies as above. However, the reference does not exemplify the use of copolyamide materials in the adhesive. Since the reference suggests that adhesion improves when using the same material in the adhesive as is used in the substrate (pp. 8-9), it is the examiner's position that it would have been prima facie obvious to form a solvent adhesive comprising a phenolic solvent and copolymerized nylon to form an adhesive suited for copolymerized nylon materials.

12. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fruck in view of Akkepeddi et al.

13. Fruck discloses multilayer pipe joints containing dissimilar materials, where a plastic inner layer serves to seal against a plastic pipe (abstract). The plastic inner layer includes conventional molded plastics like nylon (col. 4 lines 3-6). However, the reference does not disclose the claimed nylon copolymer blend. Akkepeddi discloses nylon copolymer blends, where the molding materials have improved strength, toughness, heat resistance, and chemical resistance (col. 11 lines 49-54).

***Response to Arguments***

14. In response to the applicant's arguments that the AGLC reference does not disclose copolyamide substrates, it is noted that the reference discloses that polyamide adhesives may be used to bond homopolyamides or copolyamides (see the paragraph bridging p. 11 to p. 12). Polyamide adhesives are useful for bonding a number of polyamide substrates; although the homopolyamides appear to be preferred, the reference as a whole suggests copolyamide substrates. The examiner's position of obviousness has also been maintained. The reference teaches that adhesion improves when using the same material in the adhesive and in the substrate. Since one of ordinary skill in the art would envision polyamide block copolymer substrates, it is the examiner's position that it would have been obvious to use polyamide copolymer adhesives for these copolymer substrates. Again, the reference is not limited to its preferred embodiments.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melanie D. Bissett whose telephone number is (571) 272-1068. The examiner can normally be reached on M-F 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on (571) 272-1078. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 1711

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Melanie D. Bissett  
Patent Examiner  
Art Unit 1711

mdb